Epitomes

Important Advances in Clinical Medicine

Otolaryngology

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The Council on Scientific Affairs of the California Medical Association presents the following epitomes of progress in otolaryngology. Each item, in the judgment of a panel of knowledgeable physicians, has recently become reasonably firmly established, as to both scientific fact and important clinical significance. The items are presented in simple epitome, and an authoritative reference, both to the item itself and to the subject as a whole, is generally given for those who may be unfamiliar with a particular item. The purpose is to assist busy practitioners, students, researchers, and scholars to stay abreast of these items of progress in otolaryngology that have recently achieved a substantial degree of authoritative acceptance, whether in their own field of special interest or another.

The items of progress listed below were selected by the Advisory Panel to the Section on Otolaryngology of the California Medical Association, and the summaries were prepared under the direction of Dr Davidson and the Panel.

Sleep Studies and Primary Care

OBSTRUCTIVE SLEEP APNEA is a common and serious medical illness affecting as many as 24% of adult men and 9% of adult women. Not only does obstructive sleep apnea leave the patient tired, unhappy, and nonproductive, but it is also associated with many of today's most serious illnesses, including obesity, hypertension, angina, myocardial infarction, transient ischemic attacks, stroke, congestive heart failure, end-stage renal disease, and diabetes.

Traditionally, sleep studies are performed by a small number of sleep medicine specialists using either in-hospital polysomnography or home sleep testing. The home sleep test is now so accurate and simple that it can be administered by a nurse or medical assistant under the direction of a physician. In Walla Walla, Washington, for example, local physicians were trained to conduct sleep studies and dispense nasal continuous positive airway pressure (nCPAP) machines; awareness of sleep apnea increased in the medical community as a result. Of 360 patients tested, 276 (76%) were diagnosed with obstructive sleep apnea, most of whom were successfully fitted with nCPAPs. The entire project was conducted by primary care personnel with the advice of the Stanford Sleep Medicine Program.

Sleep apnea is a prevalent and serious medical condition. An interested physician can successfully conduct home sleep studies, perform CPAP titrations, and prescribe nCPAP machines. As the medical community becomes aware of this disorder and the ability to diagnose it, more and more people will receive appropriate diagnosis and treatment.

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Vocal Cord Paralysis

INJURY TO ONE OR BOTH recurrent laryngeal nerves can have devastating effects on the basic laryngeal functions of respiration, phonation, airway protection, and swallowing. Bilateral vocal cord (vocal fold) paralysis frequently leads to airway obstruction and respiratory compromise, while unilateral vocal cord paralysis causes disturbances in voice production and swallowing, including aspiration. Typically, patients with combined superior and recurrent laryngeal nerve or high vagal nerve injuries have greater sensory and motor impairment of the hypopharynx and larynx, and thus more severe dysphagia and aspiration, than those with isolated recurrent laryngeal nerve injuries.

The most common causes of unilateral vocal cord paralysis are nonlaryngeal (mainly pulmonary) malignancies, surgical and iatrogenic trauma including prolonged intubation, and central and peripheral neurologic disorders. Idiopathic and virus-induced pareses often resolve before medical attention is sought.

Evaluation of patients with suspected unilateral vocal cord paresis includes a thorough history, complete head and neck, laryngeal, and neurological evaluations, chest radiography, and often computed tomography or magnetic resonance imagery (CT or MRI) of the skull base